**Proposed Digestive Sciences (DIG) Integrated Review Group**
**Summary of Public Comments**

## INTRODUCTION

The Digestive Sciences (DIG) Study Section Boundaries Team met from April 2 - 4, 2002, to design the study sections of the proposed DIG Integrated Review Group (IRG 18) and draft proposed guidelines. These guidelines were made available for public comment on the Center for Scientific Review (CSR) Web site for a 12-week period that ended in July 2002. CSR also received correspondence concerning the organization of this IRG and the feedback from those letters is included in this summary.

## GENERAL SUPPORT AND CONCERNS

- CSR received a number of comments supporting the proposed study section organization like the one below from the American Gastroenterological Association (AGA):

  > "….the proposal for a cohesive group of Digestive Sciences study sections as a vast improvement for both applicant investigators and reviewers. …in general we believe they provide an excellent template for the future."

- Clinically relevant grants may not fare well because they will be overwhelmed by larger number of basic science proposals. A separation into two areas such as hepatology and motility as one group, and inflammation, ion transport, and others into a second group would seem more rational and less destructive.

- There was opposition to the recommendation to assign grants related to the epidemiology of digestive diseases to non-epidemiologic study sections within the proposed DIG IRG because of a lack of reviewers with sufficient expertise to review epidemiologic studies.

- "The AGA emphasizes the need to have a diverse panel of expertise on the Xenobiotic and Nutrient Disposition and Action Study Section, the Immunology, Microbiology and Inflammation Study Section, and the Hepatobiliary Pathophysiology Study Section. For example, a heavily immunology- oriented study section may not be able to critically evaluate the import or nuances of epithelial cell biological problems in the IMI group. Conversely the IPP or GCMB may not be able to adequately review IBD grants."

## COMMENTS ON ALTERNATIVE ORGANIZATIONAL OPTIONS

In the introduction to the proposed DIG guidelines, there was a discussion concerning the options available for the IRG should the review load for a proposed study section be too low to be viable. The two options considered were:

> Option 1: Realign the subject areas in GCMB, IMI and IPP by moving repair and regeneration, cell biology and barrier function, and cell-cell and cell-matrix interactions from GCMB to IMI (the last three bullets of the GCMB guidelines) and mucosal defense and barrier function associated with acid secretion from IPP to IMI.
>
> Option 2: Realign the study sections by moving the subject areas in IMI into GCMB, HBPP and IPP and adjusting their boundaries. Much of IMI would be moved to IPP. Inflammatory bowel disease and pancreatic research would be clustered in IPP. Areas likely to move from IPP to GCMB or HBPP would include aspects of genetic determinants of disease, ion channels and transporters, nutrient absorption and metabolism, oxidative stress, and signal transduction. The name of IPP would likely have to be modified

The respondents to this introduction overwhelming supported Option 1.

## STUDY SECTION SPECIFIC COMMENTS

### Xenobiotic and Nutrient Disposition and Action (XNDA) Study Section

- Several respondents suggested that the XNDA study sections guidelines were "outstanding". It was also felt that the specific areas covered and the relationship to other studies within and outside the DIG IRG were clearly delineated.

- A number of respondents felt that the proposed guidelines, which redistribute applications now covered by ALTX-1 and ALTX-4 study sections into organ based study sections, would have a deleterious impact alcohol and toxicology research. The sentiment was the proposal would remove the review of these applications from investigators who are familiar with the physiopathology induced by acute and chronic alcohol abuse or xenobiotics. It was suggested that another study section within the DIG IRG be created to handle these proposals. Such a study section could include the effects of alcohol on the brain, heart and muscle, and immunotoxicology, developmental toxicology, inhalation toxicology, aquatic toxicology, and mechanistic toxicology (e.g., effects on signaling), amongst related topics.

### Gastrointestinal Cell and Molecular Biology (GCMB) Study Section

- GCMB would have disproportionate representation of fundamental basic research that would negatively affect certain fields. Fundamental cell and molecular

Inflammatory Bowel Disease (IBD) applications could go to the IMI.

- The guidelines reflect the overlap of grants focused on GI, liver and pancreatic-specific neoplasia with ONC IRG. Studies designed for the purpose of early detection, diagnosis and prevention of GI-related cancers should be assigned to GCMB. Digestive disease researchers do most of the cancer prevention research.

- "mRNA processing" should be replaced by "posttranscriptional control of gene expression including splicing, polyadenylation, mRNA stability, mRNA editing and translational control" as control of gene expression at translational level is not included in mRNA processing. mRNA processing only describes events that occur after transcription and before translation.

- Genotype-phenotype correlations are out of place in GCMB, although functional genomics are otherwise well placed in this study section. IRG 4 should review genotype-phenotype correlations.

- Assignment of NMR studies should be more clearly stated, e.g., proposals involving NMR studies to determine the lipid-induced structures of molecular forms of gastrin and CCK should be assigned to GCMB, not IRG 1.

**Immunology, Microbiology and Inflammation (IMI) Study Section**

- The venue for review of IBD is unquestionably the DIG IRG. IBD represents an extremely complex clinical entity with a variety of clinical and scientific facets and multiple areas of investigation, including epidemiology, bacteriology, genetics, immunology and molecular biology. It would be a mistake to transfer the review process for IBD grants to the IMM IRG, where the view and expertise would be inappropriately skewed towards an immunology focus.

- It is unwise to dilute microbiology by distributing it into disease and environment related sections. All or most aspects of microbiology reviewed by a single or two study sections.

- It is unlikely that a study section on "mucosal immunity, microbial pathogenesis, and inflammation" would be able to adequately blend these three areas of expertise in such a way that the microbial perspective will be equally represented. As written, essentially all of the grants on enteric pathogens would go to this study section. Evaluation of such grants demands a study section with substantial expertise in these areas of basic science, not simply expertise in pathogenesis, immunity, or inflammation.

**Hepatobiliary Pathophysiology Study Section (HBPP) Study Section**

- The single underlying principle supporting review by groups at the NIH is peer review. Surgeons' peers are surgeons. Applications, regardless of topic, should

have surgeons on the review bodies. That is, surgical research is research done by surgeons.

**Integrative Physiology and Pathobiology Study Section (IPP) Study Section**

- "Genetic determinants of digestive diseases" is out of place in IPP and should be in IRG 4. Physiologists and biochemists shouldn't be reviewing complex trait genetics grants. Complex trait genetics grants should be reviewed by complex trait geneticists.

- In vitro studies on intestinal lipid assembly and secretion and nutrient absorption and disposition should be mentioned.

- The effects of bile salts on lipid absorption/assembly and regulation of lipoprotein genes is not mentioned.

- Several respondents recommended that the title of this study section include the word nutrition so it reads, "Integrated Physiology, Pathobiology and Nutrition Study Section (IPPN). It was felt that including Nutrition in the title would more accurately reflect the number of nutrient topics related to this particular study section.

- Consolidation of the surgery study section into IPP will have negative impact on academic surgery.